ERRATA

Erratum: "Density depletion profile and solvation free energy of a colloidal particle in a polymer solution" [J. Chem. Phys. 115, 5292 (2001)]

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The numbers on the abscissa and the ordinate in Fig. 2 should be divided by 2 and 8, respectively. In Fig. 16 the numbers on the abscissa should be divided by $\sqrt{2}$. The corrected forms of Fig. 2 and Fig. 16 are shown below.

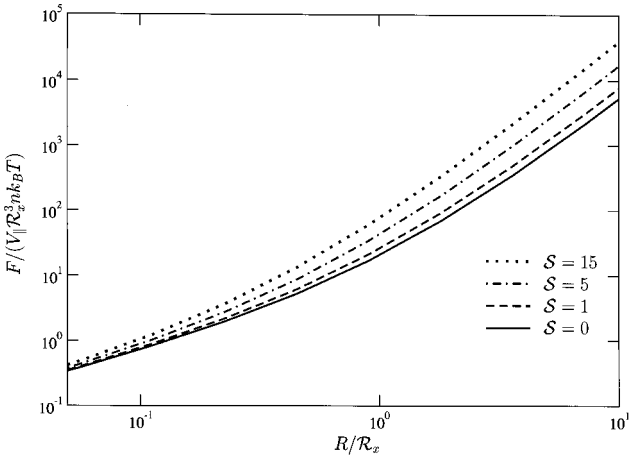

FIG. 2. Scaled solvation free energy $F/(V_\parallel \mathcal{R}_x^3 n k_B T)$ vs size ratio $\rho = R/\mathcal{R}_x$ for various values of the interchain overlap $\mathcal{S} = n/n^*$. Shown is the scaling function f_4 [Eq. (2.20)] for a cylinder of infinite length $V_\parallel = \lambda \to \infty$ in $d = 4$ dimensions. This also furnishes a qualitative estimate of the corresponding scaling function f_3 for a sphere ($V_\parallel = 1$) in $d = 3$ dimensions. Note the crossover from the overlap-independent result $2\pi\rho$ for small ρ [Eq. (1.5)] to the result $4\pi/3\ \rho^3\ (1 + \mathcal{S}/2)$ for large ρ [Eq. (2.28)].

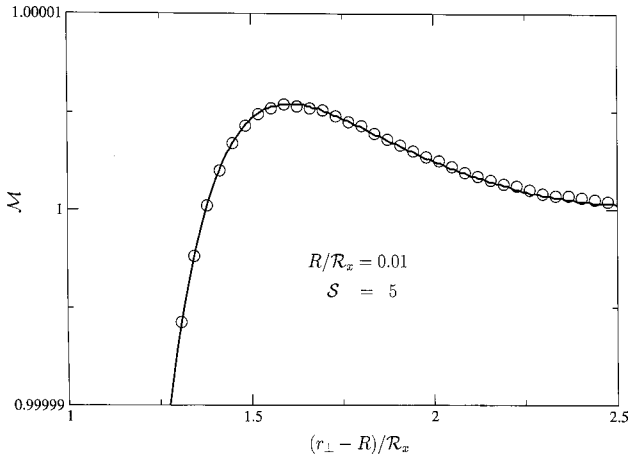

FIG. 16. Density profile with a maximum for a cylinder with $R \ll \mathcal{R}_x$ (circles). The maximum is well reproduced (full line) by the minimum in the bulk density correlation function on using the small radius expansion [see Eqs. (2.41) and (2.42)].

